APP-TECH Inc.

Proposed Changes to Express Terms, 45 Day Language

For the 2005 Building Energy Efficiency Standards

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Title 24, Part 6

APP-TECH Inc. requests that the Commission make the following changes to the proposed 2005 Building Energy Efficiency Standards. I consider these changes to be clarifications that do not warrant new 15 day language.

§121(a)1.

"All enclosed spaces in a building that are normally used by humans shall be ventilated in accordance with the requirements of this section and the CBC."

DELETE THE NOTE!

§121(b)2.A.

"The conditioned floor area of the space times the applicable ventilation rate from TABLE 121-A; and"

§121(b)2.B.

"15 cfm per person times the maximum expected number of occupants; and"

§121(b)2.C.

"15 cfm per person times ½ the maximum occupant load assumed for egress purposes in the CBC."

§146(b)2.

Delete the word "entire" from the first sentence.

§146(b)3.

Delete the word "entire" from the first sentence.

EXCEPTION 2

Delete both instances of the word "entire" from the first sentence

§151(f)10.

Add this to the second paragraph: "A space conditioning system that has no ducts, is considered to meet the package requirements for duct sealing. Therefore, footnote requirements to tables 151-B & 151-C stipulating alternatives to duct sealing do not apply."

Non-Residential ACM Manual

The following change could be significant. No specific reference is given because I could not determine where these modeling assumptions are located in the ACM.

Heat Pumps

The current performance program does not model heat pump electric resistance heaters correctly. It assumes that no more than 25% of required heating energy at design conditions will be provided by auxiliary electric heater elements, regardless of the amount of energy actually expended to provide heat at winter design conditions.

The performance program should model the Standard building heat pump with an electric resistive heating element equal to the one in the Proposed heat pump, up to, but not exceeding 25% of the total system heating output at winter design conditions. The Proposed heat pump system models the actual electric heating elements whatever their capacity.

This has the effect of only requiring Energy Budget trade-offs for the energy used by that portion of electric resistive heating that exceeds 25% of total heating capacity.